

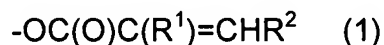
Amendments to the Claims:

Add new Claim 18. A complete listing of the claims with proper claim identifiers is set forth below.

1. (Previously Amended) A process for producing a vinyl polymer terminated with a group having a polymerizable carbon-carbon double bond comprising the steps of:

- a) obtaining a vinyl polymer by an atom transfer radical polymerization; and
- b) incorporating a group having a polymerizable carbon-carbon double bond at a terminal of said vinyl polymer in the presence of a stable free radical.

2. (Original) The process according to claim 1, wherein the group having the polymerizable carbon-carbon double bond in the vinyl polymer is represented by formula (1):



(wherein R^1 and R^2 are the same or different and each represent hydrogen or an organic group having 1 to 20 carbon atoms).

3. (Original) The process according to claim 2, wherein in formula (1), R^1 and R^2 are the same or different and each represent hydrogen or a saturated or unsaturated hydrocarbon group having 1 to 10 carbon atoms.

4. (Previously Presented) The process according to claim 2, wherein in formula (1), R^1 and R^2 are the same or different and each represent hydrogen, methyl, phenyl, or 1-propenyl.

5. (Previously Presented) The process according to claim 1, wherein the vinyl polymer is a (meth)acrylic polymer.

6. (Original) The process according to claim 5, wherein the vinyl polymer is an acrylic ester polymer.

7. (Previously Presented) The process according to claim 1, wherein the vinyl polymer is a styrene polymer.

8. (Cancelled).

9. (Cancelled).

10. (Original) The process according to claim 9, wherein the atom transfer radical polymerization is performed using a complex of a metal selected from the group consisting of copper, nickel, ruthenium, and iron.

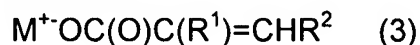
11. (Original) The process according to claim 10, wherein a copper complex is used.

12. (Previously Presented) The process according to claim 1, wherein the vinyl polymer is produced by polymerizing a vinyl monomer using a chain transfer agent.

13. (Previously Presented) The process according to claim 1, wherein the vinyl polymer is produced by reaction between a vinyl polymer having a terminal structure represented by formula (2):

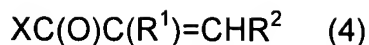


(wherein R^3 and R^4 each represent a group bonded to an ethylenically unsaturated group of a vinyl monomer, and X represents chlorine, bromine, or iodine), and a compound represented by formula (3):



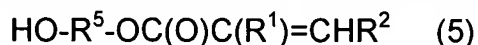
(wherein R^1 and R^2 are the same or different and each represent hydrogen or an organic group having 1 to 20 carbon atoms, and M^+ represents an alkali metal or quaternary ammonium ion).

14. (Previously Presented) The process according to claim 1, wherein the vinyl polymer is produced by reaction between a vinyl polymer terminated with a hydroxyl group and a compound represented by formula (4):



(wherein R¹ and R² are the same or different and each represent hydrogen or an organic group having 1 to 20 carbon atoms, and X represents chlorine, bromine, or a hydroxyl group).

15. (Previously Presented) The process according to claim 1, wherein the vinyl polymer is produced by reaction between a vinyl polymer terminated with an isocyanate group and a compound represented by formula (5):



(wherein R¹ and R² are the same or different and each represent hydrogen or an organic group having 1 to 20 carbon atoms, and R⁵ represents a divalent organic group having 2 to 20 carbon atoms).

16. (Previously Presented) The process according to claim 1, wherein the vinyl polymer has a number-average molecular weight of 2,000 or more.

17. (Previously Presented) The process according to claim 1, wherein the vinyl polymer has a ratio (Mw/Mn) of a weight-average molecular weight (Mw) to a number-average molecular weight (Mn) of less than 1.8 according to gel permeation chromatographic measurement.

18. (New) A vinyl polymer terminated with a group having a polymerizable carbon-carbon double bond produced by the process as described in claim 1.